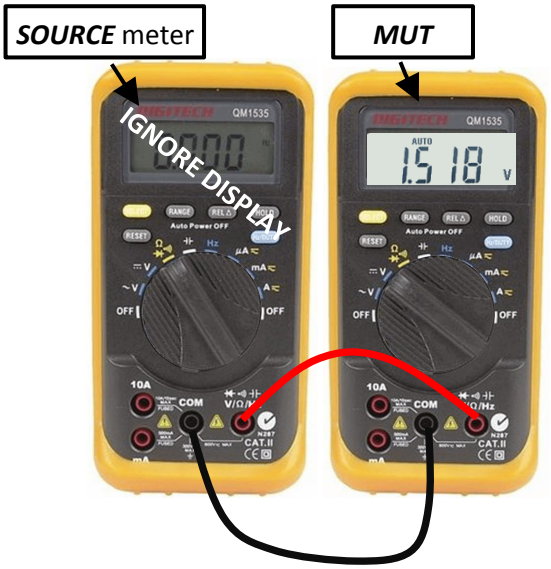
DIGITECH QM1535 DVM QUICK TESTS

This is a quick series of tests to check simple digital multimeters (DVM) for basic functionality.
It works best for quantity of the same brand and model such as a class set.
If a meter fails ONE test then that range is faulty,
if it fails more tests then the meter probably is not worth repairing

TEST (1) – *checking the ohms range, the battery and the display*
Select your first meter; select the **Ω** ⊣▶ (ohms/diode/beep) range and press the **SELECT** button once. The diode symbol ⊣▶ and a **V** will be displayed.
Plug a test lead from the **COM** socket to the **VΩHz** socket
Carefully check that the display correctly shows close to **0.000**.
Say in the range **0.000 to 0.010** (e.g. **0.002**)
If it reads higher or has an unstable reading the lead connections are bad.
Once you have a meter that passes this test we will use it as our ***SOURCE*** meter. It is used to output the test voltage for the other tests and we can ignore its display.

Now repeat TEST (1) to on the first meter to be fully tested
– we will call this our METER UNDER TEST (***MUT***).

When that ***MUT*** passes TEST (1) proceed to TEST(2)



TEST (2) – *checking the voltage range*
Connect a test lead between the **COM** sockets of the ***SOURCE*** meter and the ***MUT***.
Connect another test lead between the **VΩHz** sockets of the ***SOURCE*** meter and the ***MUT***.

On the ***MUT***; select the ⎓ **V** (dc volt) range
On the ***SOURCE*** meter; select the **Ω** ⊣▶ (ohms/diode/beep) range
Check that the display correctly shows a voltage in the range of **1.250** to **1.600**.
(Take note of the voltage to compare with other meters)

When that ***MUT*** passes TEST (2) proceed to TEST(3)

TEST (3) – *checking the current ranges*
Now on the ***MUT*** move the test lead from **VΩHz** socket to the **mA** socket and select the **mA** range.

Check that the display shows a current in the range of **00.40** to **00.70** correctly.

If the display stays at **00.00** then most likely the internal fuse has failed and will need replacing.

These tests do not test all the capabilities of the meter but will eliminate meters with that have the most common faults.

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